CLAIMS of Amendment under the article 19

[August 11, 2005 (11.08.05) Acceptance of International Office: claims 1 and 23 of initial application are amended; claims 2, 3, 10, 15, 17 and 20 of initial application are withdrawn; the other claims are not changed.]

1. (Amended) A method for manufacturing drawn biodegradable filament, comprising the steps of drawing original biodegradable filament to a draw ratio of 100 times or more by tension of 10 MPa or less per single filament according to heating with an infrared beam irradiated from plural directions.
2. (Canceled)
3. (Canceled)
4. (Unchanged) A method for manufacturing drawn biodegradable filament according to claim 1, wherein said drawn biodegradable filament is heat treated by a heating zone provided subsequently.
5. (Unchanged) A method for manufacturing drawn biodegradable filament according to claim 4, wherein said heat treatment is conducted by a zone heat treatment method.
6. (Unchanged) A method for manufacturing drawn biodegradable filament according to claim 1, wherein said drawn biodegradable filament is further drawn.
7. (Unchanged) A method for manufacturing drawn biodegradable filament according to claim 6, wherein said further drawing is conducted by a zone drawing method.
8. (Unchanged) A method for manufacturing drawn biodegradable filament according to claim 1, wherein said original biodegradable filament is drawn at the same time in the same beams delivering plural numbers simultaneously.

9. (Unchanged) A method for manufacturing non-woven fabrics consisting of drawn biodegradable filament according to claim 1, wherein said drawn biodegradable filament is accumulated on a running conveyor.

10. (Canceled)

11. (Unchanged) A manufacturing apparatus for drawn biodegradable filament comprising;

supply means of original biodegradable filament consisting of biodegradable filament,

an infrared ray heating device formed of heating within a range of up-and-down 4 mm in an axial direction of a filament at the center of an original biodegradable filament by irradiating a infrared beam from plural directions against a delivered original filament,

and means for controlling the heated original biodegradable filament to draw to 100 times or more by providing tension of 10 MPa or less.

12. (Unchanged) A manufacturing apparatus for drawn biodegradable filament according to claim 11, wherein said infrared beam is a laser beam radiated from a laser emitter.

13. (Unchanged) A manufacturing apparatus for drawn biodegradable filament according to claim 11, wherein said infrared beam emitter has mirrors to irradiate from plural directions to original filament reflecting the same beam.

14. (Unchanged) A manufacturing apparatus for drawn biodegradable filament according to claim 11, wherein said infrared beam emitter has plural light sources to irradiate to original filament from plural directions.

15. (Canceled)

16. (Unchanged) A manufacturing apparatus for drawn biodegradable filament according to claim 11, wherein drawn biodegradable filament is formed to be heat

treated providing a heating device having a heating zone in a manufacturing apparatus for said drawn biodegradable filament.

17. (Canceled)

18. (Unchanged) A manufacturing apparatus for drawn biodegradable filament according to claim 11, wherein a guiding tool controlling a position of the filament is provided before said original biodegradable filament is heated with an infrared beam and has a position control device which can finely adjust the guiding position of the guiding tool.

19. (Unchanged) A manufacturing apparatus for non-woven fabrics consisting of drawn biodegradable filament according to claim 11, wherein a running conveyor is provided to a manufacturing apparatus for said drawn biodegradable filament and is formed to accumulate drawn biodegradable filament on the conveyor.

20. (Canceled)

21. (Unchanged) A drawn biodegradable super micro-filament according to claim 1, wherein said drawn biodegradable filament have 60 % or more of X-ray orientation degree and a diameter of the drawn filament is 12 μ m or less.

22. (Unchanged) A drawn biodegradable super micro-filament according to claim 1, wherein said drawn biodegradable filament consists of polylactic acid or polyglycolic acid, birefringence of the drawn filament is 0.015 or more and a diameter of the drawn filament is 12 μ m or less.

23. (Amended) A biodegradable non-woven fabric according to claim 1, wherein it consists of said drawn biodegradable filament.

24. (Unchanged) A fiber product consisting of a drawn biodegradable filament according to claim 1, wherein each of a fiber product group consisting of said drawn biodegradable filament is different in a filament diameter and is a product group of different biodegradable speed by difference in the filament diameters.